Star Track Environmental Performance Report

For 1999

U. S. Coast Guard
Air Station Cape Cod

Facility Profile

1.1 Name of company: **U. S. Coast Guard Air Station Cape Cod, Massachusetts**.

1.2 Contact Person: **Robert F. Cannon, Jr**.

Title: **Environmental, Health & Safety Manager**
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1.3 Major products/services of facility:

Coast Guard Aviation and Support Facility

1.4 Facility information:

Number of Employees:		**Flight Missions(monthly):**	
Active Military-	246	Average Hours-	500
Civilian (GS)-	31	Average Missions-	167
Civilian (WG)-	21		

1.5 Reporting period: **FY-1999**

1.6 Date of most recent previous report, if any: **N/A**

1.7 Significant changes in facility size, products/services, that have occurred in the reporting period.
None

Policies, Organization & Management Systems

2.1 Overview of environmental policy and of management programs in place to achieve the objectives of this policy, such as: employee orientation and awareness programs, environmental risk assessment,

environmental accounting, performance evaluation, internal communications, linkages between management performance and compensation.

THE COMMANDANT OF THE UNITED STATES COAST GUARD
WASHINGTON, D.C. 20593-00001

COMMANDANT'S ENVIRONMENTAL STEWARDSHIP CHALLENGE

The Coast Guard is uniquely positioned to exhibit leadership in environmental stewardship. As enforcers of environmental laws, we ensure that precious marine natural resources are protected from harm. As an operator of a wide variety of vessels, aircraft, and support facilities, the Coast Guard also has a special duty to ensure that we use our limited natural resources wisely and minimize the environmental impact of our operations.

The Coast Guard Environmental Vision Statement "*Our Business Values the Environment*" captures the spirit of our special commitment to the environment. *I challenge all Coast Guard personnel to adopt and apply this vision in every aspect of our work and operations*. Every member of Team Coast Guard is an environmental steward in some aspect of our daily work. Whether the mission is as visible as enforcing fisheries laws or responding to an oil spill, or as transparent as maintaining our equipment or ordering copier paper, we all have a duty to value the environment. As environmental stewards we must all think ahead in order to minimize the consequences of our actions on the air, land and water. By recognizing our stewardship responsibilities and complying with applicable regulations, we can accomplish our vital Coast Guard missions while preserving the earth's precious natural resources for the future.

JAMES M. LOY
Admiral, U.S. Coast Guard
Commandant

2.2 Organizational structure and responsibilities of the Environmental, Occupational Health and Facility Safety Department.

Department Head. Under the direction and supervision of the Executive Officer, the Environmental, Occupational Health, and Facility Safety Department Head manages the unit Environmental Compliance and Pollution Prevention Program. Acts as advisor to the Command on all matters affecting Environmental, Occupational Health, and Facility Safety issues and represents the Command in all Environmental Public Affairs issues.

Administrative Assistant. Under the direction and supervision of the Department Head the Administrative Assistant provides clerical support, manages the department budget, and tracks departmental schedules and activities. Monitors the implementation of the USEPA StarTrack Program.

Facility Safety Specialist. Under the direction and supervision of the Department Head carry out the duties of the Facility Safety Officer by ensuring that OSHA, Coast Guard and other applicable safety and health standards are applied to all unit work practices. Maintains effective Safety Awareness, Accident Prevention, and Accident/Injury reporting systems, and coordinates these programs with Coast Guard Officials.

Environmental Protection Specialist. Under the direction of the Department Head the Environmental Protection Specialist manages the units Hazardous, Special and Medical Waste Programs. Maintains all associated records required by the Resource Conservation and Recovery Act, Massachusetts Hazardous waste Regulations, and Coast Guard Hazardous Waste Instructions. Coordinates all unit training requirements as mandated by Federal and State environmental regulations.

Fire Inspector. Under the direction and supervision of the Department Head the Fire Inspector engages in the regulation, inspection, control and abatement of fire hazards and promotion of fire prevention practices.

State Police/Security. Under the direction and supervision of the Department Head the Community Police Officer is the Public Safety Officer responsible uphold and to enforce laws of the Commonwealth of Massachusetts.

Health Services Technician. Under the direction and supervision of the Department Head the Health Services Technician maintains the unit sanitation program and provides industrial hygienist support.

2.3 Management systems for company-specific environmental issues such as supplier and supply chain, outsourcing, and new product development.

ASCC Instituted an inventory control process that requires environmental review (MSDS & Statement of Essential Need) and approval prior to purchase. The environmental review provides an opportunity to identify products for substitution, determine if threshold planning quantities (EPCRA/P2) have been exceeded, ensure personnel are aware of personnel protection equipment requirements (OSHA), and comply with Massachusetts Emission Standards for any architectural & industrial maintenance coatings (CAA). Resource shortages mandated an innovative approach to complete this vital task. Through a partnership with local colleges, we obtained interim assistance to develop and maintain the Hazardous Materials Inventory Program. This "win-win" arrangement provided valuable practical exposure for environmental students, enhanced community relations and produced a vital management tool for ASCC at no cost (all funding paid by the Commonwealth of Massachusetts).

Establishing a Hazardous Material Pharmacy in 1994 (centralizing and controlling/HazMat for aircraft maintenance), achieved two goals; (1) maintain shop access to hazardous material required to maintain aircraft, (2) minimize &monitor hazardous materials used and waste generated. This inventory control procurement (buy only what we need/when you need it) philosophy reflect our organization. The initial efforts focused on cultivating a paradigm change within the organization, the old mindset of "more is better" was replaced with P2 and a philosophy that promoted the concept of "ordering what was needed, but using all that was ordered".

Past practices were costly in procurement and also in disposal dollars (paying twice for nothing). Our program has shown continuous improvement in both hazardous material purchased/used and hazardous waste generated. A procedure to control inventories without impact to the operational mission and aggressive hazardous material procurement control system with environmental review was instituted. To improve management and tracking, ASCC created a hazardous material computer inventory system with authorized use lists. Aviation Engineering Department has reduced HazMat from 650 product (1994) to 150 items today. Aviation Engineering has reduced HazMat warehouse space from four storage facilities down to one, 65% square foot reduction. Through product substitution, process management changes, and recycling ASCC has reduced annual hazardous waste generation from 109,613 lbs. (1994) to 31,143 lbs. (1999)

Special Note: Of the 31,143 pounds (HW) generated in 1999, 17,210 lbs. were recycled/reused, only 13,933 lbs was disposed at a Treatment Storage and Disposal Facility.

2.4 Status and date of any external environmental certification (e.g., ISO 14001).

Beginning implementation of our EMS.

Community Relationships

3.1 Policies/procedures for considering community impacts in decision-making.

Air Station Cape Cod (ASCC) employs National Environmental Policy Act (NEPA) procedures to ensure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The NEPA process is intended to help public officials

make decisions that are based on an understanding of environmental consequences and take action that protect, restore and/or enhance the environment.

3.2 Coordination with local emergency responders (e.g., training, communication regarding risks associated with operations and/or regarding chemicals used).

ASCC, SPCC Plan establishes procedures and identifies our facility emergency response team and equipment, which shall be used to prevent or control a release of fuel and other stored petroleum products or hazardous waste to the environment. Our plan describes the necessary actions to be taken for mutual aid from other agencies on the Massachusetts Military Reservation (ARNG & ANG). The local Fire Department (Otis ANGB) located on the MMR also maintains emergency response capabilities. The Environmental Quality Committee on the MMR coordinates training and spill exercised

3.3 Communication with facility neighbors regarding procedures and evacuation plans that may be needed in case of an incident.

Management Performance

4.1 Summarize results of Star Track compliance audit, using the following categories:

a. Violations resulting in serious actual harm to public health or the environment, including violations resulting in significant economic benefit, imminent and substantial endangerment to health and the environment criminal violations, and violations of administrative or consent orders.

b. Formal enforcement actions: Notices of Violation (NOV's) and Notices of Non-Compliance (NON's) issued by states administrative orders, etc.

c. Regulatory program implementation violations such as deficiencies regarding instrument calibration, sampling protocols, container management, etc.

d. Record keeping and reporting violations such as deficiencies with monitoring reports, waste manifests, contingency plans, etc.

4.2 Summary of any management system deficiencies identified by the Star Track EMS audit.

Air Station Cape Cod's audit revealed minor revisions and updates needed in the Spill Prevention Control and Countermeasure Plan. Also noted were recommendations for improvements for the Hazardous Waste Management Contingency Plan and related training documentation. The asbestos program had not been formally documented by formal survey. Overall the Air Station was given positive feedback in all areas of the audit.

4.3 Summary of any corrective action subsequent to the Star Track audits.

The Air Station's Spill Prevention Control and Countermeasure Plan has been revised and certified. The Hazardous Waste Management Contingency Plan and related training files have also been reviewed and updated. All asbestos has been labeled and a request is on file with the local Coast Guard Civil Engineering Unit to have the Air Station formally surveyed for asbestos containing materials. All items identified in the audit have been corrected.

4.4 Number, volume, and nature of unauthorized releases to land, air, and water, including (1) accidental or episodic releases (e.g., chemical spills, oil spills) and; (2) exceedances of permits or licenses.

- **Accidental release, March 26 1999, 30 gallons/gasoline.**
- **Accidental release, June 3, 1999, 15 gallons/oil**

4.5 On-site remediation activities including nature and cost, if available.

Not Available

Operational Performance

Provide both absolute and normalized data, as well as the unit(s) of output used for normalization, Include data for current year and previous two years, as well as targets and target years.

Inputs

5.1 Electricity Use (kWh). **10,585,000 kWh**

Purchased (describe fuel source): **Commonwealth Electric Company**

5.2 Other Energy Use (BTU equivalent). **927,160 BTU**

Fuel Oil-	**None.**
Coal-	**None.**
Natural Gas-	**Supplier: Colonial Gas Company**
Other (specify)-	**None.**

5.3 Total Energy Use (in BTU equivalent: 3412.13 kWh = 1 BTU). **150,746,220,168 BTU**

5.4 Total Water Use (in gallons). **36,480,000 gal.**

Outputs

5.5 Emissions of key air pollutants: CO, lead, VOC's, NOx, PM10, SOx, other pollutants of community concern (pounds).

- **CO/6000 lbs.**
- **Nox/16000 lbs.**
- **PM-10/3800 lbs.**
- **SO2/380 lbs.**
- **VOC/24000 lbs.**

- **HAPs/3200 lbs.**

5.6 Summary of any noise or odor complaints.

None.

5.7 Emissions of greenhouse gases: CO2, methane, N2O, halo-carbons, other (pounds).

Not Available.

5.8 Emission of ozone-depleting chemicals (pounds).

- **ODS/1280 lbs.**

5.9 Chemical release data, including data reportable under all applicable statutes.

Not Available.

5.10 Emissions information on chemicals your company/facility has determined to be significant and a focus for reductions programs.

See following page.

COAST GUARD AIR STATION CAPE COD
17 CHEMICALS TARGETED FOR ELIMINATION

Benzene
Carbon Tetrachloride
Chromium and compounds
Lead and compounds
Methyl Ethyl Ketone
Methyl Isobutyl Ketone
Tetrachloroethylene

111 Trichloroethane (Methyl Chloroform)
Xylenes (all)
Cadmium and compounds
Chloroform (trichloromethane)
Cyanide compounds (inc'l Hydrogen cyanide)

Mercury and compounds
Methylene chloride
ickel and compounds
oluene
Trichloroethylene

Maintain and check **Material Safety Data Sheets** (MSDS) for all chemical products used in your operation to see if they contain one or more of the 17 chemicals targeted for elimination.

Hazardous Waste Characteristics

IGNITABLE: Easily catches fire, with a flashpoint of less than 140 degrees Farenheight

CORROSIVE: Easily corrodes materials or human tissue, very acidic or alkaline (pH <2or> 12.5)

REACTIVE: Explosive, Reacts with water or acid, unstable

TOXIC: Causes local or systemic damage and may result in adverese health effects in an organism—an asphyxiant, poison, mutagen, tetratogen, or a carcinogen

Environmental Management Policy

5.11 Hazardous waste generated and management type (e.g., incinerated with energy recovery, landfilled).

- **31,143 lbs HW Generated/ 17,210 lbs recycled/reused/13933 lbs, TSDF incineration.**

5.12 Discharges to water, by type (pounds). **N/A**

Chemical oxygen demand (COD)
Biological oxygen demand (BOD)
Priority heavy metals
Persistent organic pollutants (POP)

Environmental Performance

6.1 Major post-production environmental impacts associated with the life cycle of products and services.

Not Available.

6.2 Programs or procedures to prevent or minimize potentially adverse post-production impacts of products and services, including life cycle analysis, product stewardship initiatives, and design for the environment.

Not Available.